NOTES ON THE GENUS HETEROCORIXA WHITE WITH THE DESCRIPTION OF SOME NEW SPECIES (HEMIPTERA-CORIXIDAE).

By H. B. Hungerford, Department of Entomology, University of Kansas, Lawrence, Kansas.

The subgenus Heterocorixa was established by F. B. White¹ in 1879 to include a species taken at Prainha, 300 miles up the Amazon River. The name Heterocorixa should be given generic rank and White's species should be known under the name Heterocorixa hesperia White. This interesting genus is characterized by a short, plump body, shiny surface, coriaceous hemelytra save the left membrane which is membranous, long anterior tibia, subacute production of the inferior angle of the eye, short pronotum, and strigil and asymmetry of male abdomen right. The males have not hitherto been known, White's material consisting of females only. This little paper may therefore be of some interest, aside from the new species described herein.

For a number of years, I have had in my collection a species which I had labeled *Heterocorixa hesperia* White. Through the years I have collected considerable material of this genus, awaiting the arrival of male specimens of White's species before publishing the records. Such material has now been on hand for some time. Undescribed species have come to me from my friend and former colleague, Dr. F. X. Williams, from the Cornell University Expedition of 1919, and from various South American collectors who have known of my interest in this family of insects.

Heterocorixa williamsi n. sp.

Size: 5 mm. long.

Color: Rather pale. The dark color reddish brown and the light color pale lemon yellow. Hind margin of head margined with black. Pronotum pale, with four or five reddish brown curved bands, the median of which are thicker than the others. The hemeltyra evenly mottled with the light and dark about evenly divided. The pattern in oblique series on clavus and more or less longitudinal on corium. A submarginal dark stripe extends from tip of right clavus, along the distal end of corium diverging somewhat from the margin until it vanishes in the field of the membrane.

¹ Trans. Ento. Soc. London, Vol. 17, 3rd Series, p. 272.

Structural characteristics: Head longer than the very short pronotum which it embraces. Anterior curve of the head as seen from above broadly rounded. Head without median longitudinal carina. Inner margins of the eyes as seen from the face view plainly divergent. Facial depression of male very slight. Metaxyphus long, slender and acuminate. Male pala is shown in Figure 11. The dorsal view of the male abdomen shows a well-developed strigil and an even comb on the margin of the segment preceding it (see Figure 12). The genital capsule is shown in Figure 10.

Described from 26 specimens taken at Tena, Ecuador, Feb-

ruary 23, 1923, by Dr. F. X. Williams.

Heterocorixa nigra n. sp.

Size: 5 mm. long.

Color: Nearly black. Head suffused with smoky black, pronotum rough, black save for a few, considerably broken, indefinite pale bands. Hemelytra black save for a few broken oblique pale figures. Limbs black save anterior

femora. Thorax black, abdominal venter dusky.

Structural characteristics: Head longer than pronotum. Anterior curve of the head as seen from above, roundly acuminate. Head with very faint median carina. Inner margins of the eyes as seen from the face view, almost parallel. Facial depression slightly more marked than in preceding species. Metaxyphus long and slender. Male pala as shown in Figure 8. The dorsal view of the male abdomen shows a linear strigil and a comb on the margin of the segment preceding with longer teeth than in H. williamsi (see Figure 9).

Described from 6 specimens taken at Sao Paulo, Brazil, by R.

Spitz.

Heterocorixa boliviensis n. sp.

Size: 5.4 mm. long.

Color: Color effect dark, the ground color being chocolate brown and dense. Pronotum rough, larger than in preceding species and crossed by eight light ragged-edged bands that anastomose here and there. Hemelytra mottled throughout with irregular crowded figures. Limbs and venter pale.

Structural characteristics: Head not longer than pronotum. Anterior curve of the head as seen from above shows the vertex advanced beyond the curve of the eye. Head with faint median carina. Inner margins of the eyes as seen from the face view almost parallel. Facial depression of male without definite margin, but more conspicuous than in preceding species. Metaxyphus long and slender. Male pala much like that of *H. nigra*, but with less irregular dorsal line. The dorsal view of the male abdomen shows a triangular strigil, and the teeth of the comb on the margin of the segment preceding, of two sorts—a curved row of long teeth to the left of the median line of the strigil, continued as a row of shorter teeth to the left margin. (See figures 4, 5 and 6).

Described from 18 specimens taken at Buenavista, Bolivia, Dept. Santa Cruz, S. A., by R. T. Steinbach.

Heterocorixa brasiliensis n. sp.

Size: 6 mm. long.

Color: Pattern meally, neither the brown nor the pale color dominant or arranged in a pattern. Pronotum and hemelytra uniform in color tone with slender brown bands on pronotum faintly visible. Inner base of clavus slightly paler than elsewhere. Venter pale, shadowy spots on lateral ventral margins of the 4th, 5th and 6th abdominal segments.

Structural characteristics: Anterior curve of the head as seen from above roundly acuminate. Head with very faint median carina. Head and pronotum subequal in length. Metaxyphus long and slender. This is a very distinct species from standpoint of structure, the male pala possessing very few pegs and the clasper being broad and flat. The strigil is smaller than for the other species, although the species is larger. The comb of teeth on caudal margin of preceding segment reduced to a very few which lie in front of the strigil. (See Figures 13, 14 and 15.)

Described from six specimens taken by Cornell Univ., Exp., Corumba, Brazil. Matto Grosso, Dec. 14–22, 1919.

Comparative notes: This species is larger than the Heterocorixa hesperia White. The head is a trifle longer and the interocular width appears less than those insects which came from the general region of the lower Amazon and which I have called Heterocorixa hesperia White. The male characters are also different.

Heterocorixa hesperia White, variety, chapodiensis var. n.

This form resembles very closely the material from the vicinity of Para. It is, however, a little smaller and there is even a possibility that it is a distinct species. The male pala, dorsum of abdomen and male genital capsule are shown on Figures 1, 2 and 3.

EXPLANATION OF PLATE III

- Fig. 1. Heterocorixa hesperia Whit., var. chapodiensis, var. n., male genital capsule.
- Fig. 2. Heterocorixa hesperia White., var. chapodiensis, var. n., pala of male.
- Fig. 3. Heterocorixa hesperia White., var. chapodiensis, var. n., dorsum of male abdomen.
- Fig. 4. Heterocorixa boliviensis sp. n., male genital capsule.
- Fig. 5. Heterocorixa boliviensis sp. n., pala of male.
- Fig. 6. Heterocorixa boliviensis sp. n., dorsum of male abdomen.
- Fig. 7. Heterocorixa nigra, sp. n., male genital capsule.
- Fig. 8. Heterocorixa nigra, sp. n., pala of male.
- Fig. 9. Heterocorixa nigra, sp. n., dorsum of male abdomen.
- Fig. 10. Heterocorixa williamsi, sp. n., male genital capsule.
- Fig. 11. Heterocorixa williamsi, sp. n., pala of male.
- Fig. 12. Heterocorixa williamsi, sp. n., dorsum of male abdomen.
- Fig. 13. Heterocorixa brasiliensis, sp. n., male genital capsule.
- Fig. 14. Heterocorixa brasiliensis, sp. n., pala of male.
- Fig. 15. Heterocorixa brasiliensis, sp., n., dorsum of male abdomen.

A Minor Rectification.—In this Bulletin (p. 272, vol. XXII), in a discussion of the number of segments in the hemipterous rostrum, McAtee names several species. One of these is Salda ligata, which properly belongs in the genus Pentacora as defined by Reuter. His use of the specific name mulsanti for our common Eastern Mesovelia may be allowable, but, as I have pointed out elsewhere, Champion's dictum may be ignored in view of the fragmentary character of descriptions in this genus, excepting those lately described by Hungerford. For this reason, I hold that the name bisignata Uhler should be maintained. Blatchley, in his Manual, however, adheres to mulsanti.—J. R. de La Torre Bueno, White Plains, N. Y.